

## NOTES ON THE LIFE HISTORY OF THE RUSTY-MARGINED FLYCATCHER IN SURINAM

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IN Surinam the Rusty-margined Flycatcher (*Myiozetetes cayanensis*) is one of the commonest birds. For a general description, its habitat and breeding habits the reader is referred to my "Birds of Surinam" (Haverschmidt, 1968). Two life-histories have been published, a short one by Skutch (1960) from Barro Colorado in Panama and an extensive one by de Carvalho (1960) from Brazil. My records from Surinam corroborate the observations by both authors and give some additional details of its life history.

### VOICE

The call or song is uttered by both sexes while flapping their wings, often as a duet. It is a shrill and high pitched note described by Snyder (1966) as *keeyeee*.

I have noticed another, quite distinct call given only when a hawk or hawk-like bird passed low over or alighted nearby. This is a shrill and long-drawn *eeeeeee*. When a Roadside Hawk (*Buteo magnirostris*) or a Gray Hawk (*Buteo nitidus*) came to my garden to look for lizards or a Yellow-headed Caracara (*Milvago chimachima*), which is a notorious nest-robber, alighted the flycatchers sounded this "hawk alarm" immediately. I have often profited by this behavior in locating hawks. I have also heard it regularly in the mangroves where the Crab Hawk (*Buteogallus aequinoctialis*) abounds, but the flycatchers have nothing to fear from this species which specializes on crabs.

The flycatchers made sometimes "mistakes" in uttering this alarm. In 1957 a pair of Cayenne Swifts (*Panyptila cayennensis*) nested against the wall of my house. Every time a swift approached with tremendous speed, low over the ground to shoot upward into its nest this "hawk alarm" was heard, and when on 7 August 1964 a Dusky Parrot (*Pionus fuscus*) dashed with a terrific speed through the trees of a coffee plantation the flycatchers there uttered the same alarm call.

### TERRITORY

The birds are strictly territorial and do not allow the presence of other individuals of the species near their nest. On 21 November 1962 I observed an interesting incident of this. There was a Rusty-margined Flycatcher nest

high up in a tree and one of the birds pursued a flying insect down to the ground. During this pursuit it came in front of a parked car and on seeing its image in the front shield of the car, it started fighting it, dashing against the glass. This fight lasted about four minutes.

#### BREEDING SEASON

Many nests are high up in trees and their contents cannot be inspected. Of 33 nests that were inhabited, two were in January, seven in February, four in March, three in April, one in May, two in June, one in July, two in August, three in September, three in October, three in November, and two in December.

#### NEST-BUILDING

The nest is an untidy ball of long and dead grasses with a wide side entrance (Fig. 1). As the sexes are alike it was often difficult to be sure which bird was building and I often got the impression that only one bird took part in it. However, on 16 October 1963 I observed on five occasions both partners arriving simultaneously with long pieces of nest-material in their bills and both working together at the nest.

Very often a nest is started and pulled down the same day or a few days later to begin again at another place, the material for the new nest being pulled out of the first trial. A nest started on 18 January 1958 was demolished the next day and another nest started in which a brood was reared. Another nest where building began on 2 March 1958 was pulled down the same day, the second nest was demolished on 5 March and a brood was reared in the third nest.

Nest-building was accomplished in from 9–14 days. In the nest started on 19 January 1958, the first egg was laid on 28 January, building lasting nine days. The nest started on 5 March 1958 contained two eggs on 16 March, building taking about 10 days and in the third nest that was started on 20 May two eggs were present on 7 June, building lasting here about 14 days.

The birds are very active in building in the early morning and late afternoon and I observed building as late as 18:20, just before sundown.

#### EGG-LAYING AND CLUTCH SIZE

As already remarked by Skutch (1960) the eggs are laid on alternate days and I could corroborate in two cases. In one nest the first egg was laid on 28 January 1958; in the afternoon of 29 January there was still one egg; and the second and last egg was found on 30 January at 17:45. Another nest



FIG. 1. Nest of *Myiozetetes cayanensis*, Paramaribo, Surinam, 6 February 1950.

contained one egg on 25 August 1961; in the afternoon of 26 August there was still one egg; the second and last egg was found in the afternoon of 27 August. De Carvalho observed the same behavior but said that laying on consecutive days may also occur.

In nine full clutches there were six of two eggs and three of three eggs.

#### INCUBATION PERIOD

Only one bird, probably the female, incubates. The incubation period estimated from the laying to the hatching of the last egg was 16 days. The last egg was laid on 30 January 1958, on 14 February at 18:00 there was one egg and one nestling, and on 15 February at 15:30 two nestlings. This seems to be in contrast to the incubation period of 14 days mentioned by de Carvalho in the English summary of his paper. However, he states in the original text that the incubation period was estimated from the laying of the last egg till the hatching of the first nestling, hence this difference. He also mentions an incubation period of 15–16 days, taking into account that the eggs are laid on alternate days.

## NESTLING PERIOD

Two nestlings that hatched on 14 and 15 February 1958 left the nest on 6 March after about 19 days. Both of them remained in the neighborhood of the nest where they continued to be fed by their parents till 26 March, 20 days after having left the nest. The second breeding cycle was already under way at this time.

## NUMBER OF BROODS REARED IN A SEASON

De Carvalho (1960) says that possibly two broods are reared in a season. In 1958 a pair in my garden reared three broods and after a pause of six months at least another two.

On 2 March 1958 the two nestlings are still in the nest but it was obvious that a second brood would start soon. Both birds often sang, with flapping wings, in a duet and the building of a new nest in a coffee shrub near by began. Feeding of the nestlings in the nest and the building of the new nest alternated. The new nest was pulled down on the same day another one was started. On 5 March this nest was pulled down and just below the nest with the nestlings still in it, a third one was built.

On 16 March this last nest contained two eggs that hatched on 2 or 3 April and fledged about 20 April. It is clear from these data that brood II overlapped with brood I in the building stage of brood II. The interval between the day the nestlings of brood I left the nest and the day of laying the eggs of brood II was about nine days.

On 20 May the nest of brood II was pulled down and building started at the place of nest I where a few grasses remained. On 7 June I found two eggs. Two nestlings were reared that left the nest at the end of June.

In a period of five months (the end of January until the end of June) this pair bred three times, rearing six young. There followed a pause of six months though the pair stayed in my garden.

On 29 December 1958 after several false starts a new nest was built that contained three eggs on 13 January 1959 and three nestlings left this nest on 17 February. On the same day a new nest was built high up in a tree in which the second brood was reared.

## PREDATION

Nests in the process of building but also containing eggs or nestlings are sometimes pilfered by Great Kiskadees (*Pitangus sulphuratus*) that use the material for building their own nests. Inhabited nests are often taken over by the Piratic Flycatchers (*Legatus leucophaeus*).

A notorious nest robber is the Yellow-headed Caracara that I surprised

sometimes robbing nests in my garden. On 1 September 1961 there was a nest of *Myiozetetes cayanensis* in my garden with two eggs. I suddenly heard the piercing "hawk alarm" and saw two of these hawks in the nest tree. One of them on the nest, the other one perched above it. After having chased them away I found the nest in disorder and the eggs already damaged.

#### SUMMARY

The Rusty-margined Flycatcher (*Myiozetetes cayanensis*) is one of the commonest breeding birds in Surinam. The birds are strictly territorial. Breeding takes place all through the year.

Apart from its shrill call which is uttered by both birds while flapping their wings in a duet, a special alarm call for hawks and hawk-like birds is described.

The nest is an untidy ball with a wide side entrance, and the male may on occasion help build it. A newly started nest is often pulled down and the material from it used for the next trial. Nest-building lasts from 9–14 days.

The eggs are laid on alternate days. Nine full clutches contained six of two eggs and three of three eggs.

Incubation is by one bird only and lasted 16 days. The nestling period lasted 19 days and the fledglings were fed for another 20 days.

With one pair three broods were reared in rather quick succession, the second brood overlapping with the first during the building period of the second nest. The rearing of three broods from which six nestlings fledged took a period of five months. After a pause of six months two more broods were reared.

Predators are the Great Kiskadee (*Pitangus sulphuratus*) which pilfers nests, the Piratic Flycatcher (*Legatus leucophaius*) which takes over inhabited nests, and the Yellow-headed Caracara (*Milvago chimachima*) which robs nests.

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